

ABSTRACT OF THE DISCLOSURE

In the oscillating internal-meshing planetary gear system of the present invention, a space formed between an external gear (52) and an internal gear (8) is filled up with a grease (14), which contains base oil whose kinetic viscosity is equal to or higher than $10 \text{ mm}^2/\text{s}$ at 100°C and lithium complex thickener synthesized from adipic acid. Such construction of the oscillating internal-meshing planetary gear system of the present invention provides a power transmission system using a trochoidal tooth profile gear and a circular-arc tooth profile gear that enables to realize a long life and keeping a high efficiency, even without applying grease containing sodium nitrite.